

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

Red Rhino Leak Detection, Inc.,

File No. 18-cv-3186 (ECT/DTS)

Plaintiff and Counterclaim
Defendant,

v.

OPINION AND ORDER

Anderson Manufacturing Company, Inc.,

Defendant and Counterclaimant.

Kelly G. Swartz and Mark F. Warzecha, Widerman Malek, PL, Melbourne, FL, and Jack E. Pierce, Bernick Lifson, Minneapolis, MN, for Plaintiff and Counterclaim Defendant Red Rhino Leak Detection, Inc.

Devan V. Padmanabhan and Erin O. Dugan, Padmanabhan & Dawson, PLLC, Minneapolis, MN, for Defendant and Counterclaimant Anderson Manufacturing Company, Inc.

This is the second of two patent-infringement cases brought in this District between Plaintiff Red Rhino Leak Detection and Defendant Anderson Manufacturing Company. In the first-filed case, Red Rhino alleged that a product Anderson sold for detecting leaks in swimming pools infringed Red Rhino's U.S. Patent No. 9,464,959 (the "'959 Patent"). In this case, Red Rhino alleges that two of Anderson's products, the Light Tester and the LeakTrac Light Cover Version 2, infringe Red Rhino's U.S. Patent No. 10,088,383 (the "'383" Patent), which is a continuation-in-part of the '959 Patent. *See Am. Compl.* ¶¶ 12–13 [ECF No. 16]. Anderson has requested claim construction with respect to three disputed

terms in the '383 Patent pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390–91 (1996).

The Parties dispute the meaning of the following claim terms:

- “an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing”;
- “threaded rod”; and
- “opaque material.”

Joint Claim Construction Statement [ECF No. 64-1]. The first two disputed claim terms appear in claim 1, which in its entirety provides as follows:

A leak detecting device for a swimming pool light in a water filled swimming pool comprising:

a housing having a continuous perimeter edge sized to extend around a swimming pool light forming a hollow interior having a ***threaded rod*** extending through an aperture in said housing;

an anchoring attachment secured to an end of the ***threaded rod*** for immovably anchoring the housing to an underwater swimming pool light;

an annular resilient seal secured to said perimeter edge, said seal adapted to contact and form a seal between said housing and an underwater surface adjacent the swimming pool light, said seal being for effecting anchoring in a sealing engagement around the swimming pool light and being in a non-movable stationary position relative to the swimming pool light;

an inlet forming an opening through said housing and extending into the opening providing accessible from an exterior ***to selectively deliver a dye solution for leak detection purposes into the interior of said housing***;

whereby the flow of the dye inserted in the interior is observable by a user of the device for determining leakage

underwater within the defined perimeter relative to the defined underwater surface of the swimming pool.

'383 Patent at 6:19–43 [ECF No. 84-1] (emphasis added). The third disputed claim term appears in dependent claim 7, which in its entirety provides as follows:

The leak detecting device for swimming pool lights according to claim 1 wherein said housing is of an *opaque material*.

Id. at 6:60–62 (emphasis added).

I

Anderson proposes that “an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing” be construed to mean “[a]n inlet . . . to deliberately inject or force dye into the inside of the housing.” Joint Claim Construction Statement. Red Rhino disagrees on two fronts. It argues first that the doctrine of issue preclusion requires that this phrase be construed just as it was in the claim-construction order in the Parties’ first case. *See Red Rhino Leak Detection, Inc. v. Anderson Mfg. Co., Inc.*, No. 17-cv-2189 (ECT/DTS), 2019 WL 4039972, at *6–8 (D. Minn. Aug. 27, 2019) (“*Red Rhino I*”). In other words, Red Rhino says that this same phrase was construed in *Red Rhino I* and must, pursuant to issue preclusion, be given the same construction here. Alternatively, Red Rhino argues that no construction is necessary, or at least that the phrase should not be construed to require deliberate injection or forced delivery of dye into the interior of the housing. Joint Claim Construction Statement; Pl.’s Mem. at 9–13 [ECF No. 91].

A

Applying issue preclusion here entails a mixed application of Eighth Circuit and Federal Circuit law. Issues not unique to patent cases are governed by the precedent of the regional circuit. *Aspex Eyewear, Inc. v. Zenni Optical Inc.*, 713 F.3d 1377, 1380 (Fed. Cir. 2013) (“*Aspex Eyewear I*”). Ordinarily, issue preclusion falls in that category. As the Federal Circuit has explained, the “criteria” governing issue preclusion “are not unique to patent issues,” so “we are guided by the precedent of the regional circuit in applying those principles.” *Id.*; see also *e.Digital Corp. v. Futurewei Techs., Inc.*, 772 F.3d 723, 726 (Fed. Cir. 2014) (applying Ninth Circuit issue preclusion rules); *Dana v. E.S. Originals, Inc.*, 342 F.3d 1320, 1323–27 (Fed. Cir. 2003) (applying Eleventh Circuit issue preclusion rules); *Mycogen Plant Sci., Inc. v. Monsanto Co.*, 252 F.3d 1306, 1310 (Fed. Cir. 2001) (“Collateral estoppel . . . applies to common issues in actions involving different but related patents.”), vacated on other grounds, 535 U.S. 1109 (2002). In the Eighth Circuit, issue preclusion has five elements:

- (1) the party sought to be precluded in the second suit must have been a party, or in privity with a party, to the original lawsuit; (2) the issue sought to be precluded must be the same as the issue involved in the prior action; (3) the issue sought to be precluded must have been actually litigated in the prior action; (4) the issue sought to be precluded must have been determined by a valid and final judgment; and (5) the determination in the prior action must have been essential to the prior judgment.

Sandy Lake Band of Mississippi Chippewa v. United States, 714 F.3d 1098, 1102–03 (8th Cir. 2013) (citation omitted).

However, for aspects of the case that have “special or unique application to patent cases,” Federal Circuit precedent controls. *Aspex Eyewear I*, 713 F.3d at 1380. Here, Red Rhino and Anderson dispute whether the issue sought to be precluded—the construction of “an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing”—is the same issue involved in *Red Rhino I*. Pl.’s Mem. at 7–13; Def.’s Reply Mem. at 3–7 [ECF No. 92]. On this question, the Federal Circuit has observed that “the question whether a particular claim in a patent case is the same as or separate from another claim has special application to patent cases, and we therefore apply our own law to that issue.” *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1341 n.1 (Fed. Cir. 2012) (“*Aspex Eyewear II*”). The Federal Circuit has instructed that “a court cannot impose collateral estoppel to bar a claim construction dispute solely because the patents are related.” *e.Digital Corp.*, 772 F.3d at 727. Each case requires an independent determination. *Id.* If a continuation-in-part application discloses new or different matter materially impacting the claim’s interpretation, then a new claim construction is required. *Id.*

So what was the relevant issue involved in *Red Rhino I*? There, Anderson sought construction of two claim terms that, like the claim term at issue here from the ‘383 Patent, concerned the inlet in the device’s rigid housing. The claim terms at issue in *Red Rhino I*, bolded below in their fuller context, were:

a rigid housing having a threaded rod extending through said housing, said threaded [sic] rod terminating in a suction cup of a resilient material for anchoring said housing to an underwater surface, said housing hollow on its interior, coupled to the resilient seal having an opening therethrough and having ***an***

inlet extending into the opening accessible from the exterior **to selectively deliver fluid through the inlet into the interior of the housing**, or for coupling a flow meter thereto to detect the flow of water into or out of said housing, **or deliver a dye solution for leak detection purposes into the interior of said housing** and through the central opening of the resilient seal, the housing being transparent whereby the flow of dye in the hollow housing is observable by a user of the device[.]

Red Rhino I, 2019 WL 4039972, at *6 (quoting '959 Patent at 4:67–5:8). The construction given these terms was affected substantially “by whether and how they interrelate in context,” *id.* (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc)), and it is worth quoting the relevant (if lengthy) aspects of that construction here:

As an initial matter, construing these terms requires the Court to determine how the word “selectively” functions in the claim language excerpted above. At the hearing, the possibility that the word “selectively” introduced and applied to all three potential functionalities was explored—in other words, that a user could select any one of the three listed options, and the structure of the inlet is such that it would permit whichever option the user selected. That construction, however, cannot be reconciled with the grammatical structure of the claim. In particular, as both Parties acknowledged during the hearing, although it would make sense grammatically for “an inlet . . . to . . . deliver fluid through . . . the interior of the housing” or for “an inlet . . . to . . . deliver a dye solution for leak detection purposes into the interior of said housing,” depending on which of those options the user selected, it would make no sense for “an inlet . . . to . . . for coupling a flow meter thereto to detect the flow of water into or out of said housing.” '959 Patent at 4:67–5:6. “A claim must be read in accordance with the precepts of English grammar.” *In re Hyatt*, 708 F.2d 712, 714 (Fed. Cir. 1983).

The only grammatically sound reading of this portion of the claim requires that the word “selectively” be read as modifying only the first of the three distinct leak-detecting functions that may be enabled by the inlet in the rigid housing. Those three leak-detecting functions are, first, “selectively deliver[ing]

fluid through the inlet into the interior of the housing, or”; second, “for coupling a flow meter [to the inlet] to detect the flow of water into or out of [the] housing”; or third, “deliver[ing] a dye solution for leak detection purposes into the interior of said housing and through the central opening of the resilient seal.” ’959 Patent at 5:1–7. In this last potential function, the transparent housing permits the user to observe “the flow of dye in the hollow housing” as it enters “into the interior of [the hollow] housing and through the central opening of the resilient seal”—that is, through the inlet, into the hollow housing, and through the water it contains; if there is a leak, the dye will then flow out the central opening of the resilient seal and into or toward the site of the leak. *Id.* at 5:5–8.

The fact that the adverb “selectively” modifies the verb “deliver” only with respect to the first potential function of the inlet as described in claim 1—to selectively deliver fluid—and not to the third potential function of the inlet as described in that claim—to “deliver a dye solution,” *id.* at 5:1–5—strongly implies that to “deliver” a substance means something different than to “selectively deliver” a substance, *See Phillips*, 415 F.3d at 1314 (the reference in a claim to “‘steel baffles’ . . . strongly implies that the term ‘baffles’ does not inherently mean objects made out of steel.”); *see also id.* (“[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms.”). Yet neither Anderson nor Red Rhino have proposed a construction that recognizes the distinction that exists within the claim itself between “selectively” delivering a substance as opposed to simply delivering it. *See id.* (“[T]he context in which a term is used in the asserted claim can be highly instructive.”). Anderson proposes construing both of those claim terms to require “inject[ion] or forc[ing]” of fluid or dye into the housing, both of which necessarily imply the deliberate choice by the user to introduce the substance into the housing. Anderson Br. at 10. Red Rhino proposes that both should be understood to mean allowing dye to be delivered through the inlet by natural hydrodynamic forces according to the presence or absence of a leak. Red Rhino Br. at 22, 25. Constructions of these terms that would elide any distinction between the delivery described in the third option and the selective delivery described in the first option

must be rejected because it seems clear from the claim itself that those terms mean different things.

So what does “selectively” mean in this context? Anderson contends that to “selectively deliver” fluid means to deliver it “at the selection of the operator.” Anderson Br. at 10. It points to a dictionary definition, arguing that “[t]he ordinary meaning of selectively is ‘characterized by selection,’ and ‘selection’ is synonymous with ‘choice.’” *Id.* at 11 (quoting Dungan Decl. Ex. 13). It also argues from the testimony of its own expert, as a person with ordinary skill in the art, that “‘selectively’ means somebody has chosen to put this fluid someplace rather than another place. There’s a choice being . . . done.” *Id.* (quotation and internal citation omitted). But such extrinsic evidence is less useful and less reliable than the intrinsic evidence provided by the claims themselves and the remainder of the specification, and it cannot be used to contradict the intrinsic evidence. *Phillips*, 415 F.3d at 1317–18; *Mantech*, 152 F.3d at 1373.

Here, the intrinsic evidence makes clear that Anderson’s proposed construction of the term “selectively deliver” cannot be correct. Grammatically, the phrase “selectively deliver” as used in this claim term does not refer to the action of a sentient human operator, but to an “inlet,” which is not sentient and is not capable of choice. ’959 Patent at 5:1–2. It makes far more sense to construe the term “selectively deliver fluid through the inlet,” *id.*, to mean the capacity of the inlet to “deliver, or not deliver, fluid through the inlet according to the operation of natural hydrodynamic forces and the presence or absence of a leak,” *see Red Rhino Br.* at 22. This reading preserves the distinction present within the claim itself between delivery that is made selectively and delivery that is not. Such a reading is also consistent with, and therefore supported by, the specification. *See generally Vitronics*, 90 F.3d at 1582 (the specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.”). Here, the specification describes that an operator who is not in the water might use the device to test for leaks by connecting a hose to a barb inlet on the device, running the hose to the surface of the pool, and injecting a dye solution into the hose; “[i]f there is a leak, the dye solution will be sucked into the barb that is

functioning as an inlet,” but if the component being tested is not leaking, “the dye will not be sucked in but instead maintain a natural swaying motion underwater.” ’959 Patent at 3:8–17. That preferred embodiment would not be possible under Anderson’s proffered construction, in which both of the leak-detection applications described in claim 1 as using dye or fluid would be construed to require “inject[ing] or forc[ing] a substance] into the inside of the housing” rather than relying on the presence o[r] absence of a leak to either cause or not cause the dye to be sucked into the hose. *See* Anderson Br. at 10. To the contrary, reading claim 1 “in view of the specification, of which [it is] a part,” *Phillips*, 415 F.3d at 1315 (citation omitted), requires rejecting Anderson’s proffered construction of the term “selectively deliver fluid through the inlet,” ’959 Patent at 5:1–2, and instead construing it to mean to “deliver, or not deliver, fluid through the inlet according to the operation of natural hydrodynamic forces and the presence or absence of a leak,” as described above, *see* Red Rhino Br. at 22.

By contrast, the term “deliver a dye solution,” ’959 Patent at 5:4–5, strongly implies that the delivery described in that term is *not* selective—that is, that the delivery or non-delivery of the dye does *not* depend on the operation of natural hydrodynamic forces and the presence or absence of a leak. Rather, plain old delivery—when juxtaposed elsewhere in the same claim with delivery that is made *selectively*—indicates that delivery is in fact achieved, regardless of the presence or absence of a leak. Red Rhino acknowledges that, if no leak is present within the defined perimeter about which the seal of the engages, then natural hydrodynamic forces will not cause dye deposited somewhere outside the inlet to be drawn through the inlet. Red Rhino Br. at 21. Therefore, achieving “deliver[y of] a dye solution for leak detection purposes into the interior of [the device’s] housing” when (as will sometimes be the case) no leak is present necessarily requires some amount of force or injection of the solution through the inlet. ’959 Patent at 5:4–6. Such a construction finds further support elsewhere in the specification, which describes one preferred embodiment in which the operator “may dive underwater with a dye solution and inject it through [a] barb inlet using a syringe or the like.” *Id.* at 3:19–20; *see generally* *Vitronics*, 90 F.3d at 1582.

Red Rhino I, 2019 WL 4039972, at **7–8 (footnotes omitted).

The issue here—the construction of “an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing”—is different. It is true that claim 1 of the ’383 Patent contains similar language to the previously disputed claim 1 terms in the ’959 patent, and Anderson here seeks a similar construction to what it sought in *Red Rhino I*:

Patent	Pertinent Claim 1 Language (disputed terms)	Anderson’s Proposed Construction
’959	an inlet . . . to selectively deliver fluid through the inlet into the interior of the housing, or for coupling a flow meter thereto to detect the flow of water into or out of said housing, or deliver a dye solution for leak detection purposes into the interior of said housing	a fluid inlet structure . . . to deliberately inject or force fluid through the fluid inlet structure into the inside of the housing at the selection of the operator or inject or force a dye solution into the inside of the housing, where it is used therein to detect leaks
’383	an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing	an inlet . . . to deliberately inject or force dye into the inside of the housing

See *Red Rhino I*, ECF No. 40-3 at 8, 11; Joint Claim Construction Statement at 1. But as the lengthy analysis quoted above from *Red Rhino I* shows, there are material differences between claim 1 of the ’959 Patent and claim 1 of the ’383 Patent. Claim 1 of the ’959 Patent explicitly disclosed three potential functions of the inlet, and the need to construe the terms used to describe each function in context drove the claim construction in *Red Rhino I*. Claim 1 of the ’383 Patent is different. In effect, it collapses the two claim terms construed to mean different things in *Red Rhino I* into a single term, as illustrated by a chart Anderson included in its reply brief:

'959 Disputed Term #1	'959 Disputed Term #2	'383 Disputed Term
“an inlet...to selectively deliver fluid through the inlet into the interior of the housing”	“or deliver a dye solution for leak detection purposes into the interior of said housing”	“an inlet...to selectively deliver a dye solution for leak detection purposes into the interior of said housing”

Def.’s Reply Mem. at 4. In other words, “selectively deliver” modifies a different function in the ’383 Patent than in the ’959 Patent and has been combined with a term that was construed separately in *Red Rhino I*, where context and the interrelation of the two terms was critical to their construction. This seems to be just the sort of material difference the Federal Circuit has said prevents the application of issue preclusion and renders the construction of this term here a new and different issue. *e.Digital Corp.*, 772 F.3d at 727; see *Virginia Innovation Scis., Inc. v. Amazon.com, Inc.*, Nos. 4:18-cv-474 to -477, 2019 WL 4259020, at **35–37 (E.D. Tex. Sep. 9, 2019); *Rivera v. Remington Designs, LLC*, No. LA CV16-04676 JAK (SSx), 2017 WL 3449615, at **4–5 (C.D. Cal. July 7, 2017).

B

That brings us to the construction of “an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing” in the ’383 Patent. The basic standards governing claim construction are easy to recite, if sometimes difficult to apply. Courts, not juries, construe patent claims. *Markman*, 517 U.S. at 391. In general, claim language means whatever it would have meant, ordinarily and customarily, to a person of ordinary skill in the relevant art at the time the patent application was filed. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). Sometimes the ordinary and customary meaning of claim language to a person of ordinary skill in the art may be

identical to the meaning of that language to a lay person who is not skilled in the art. *See id.* at 1314 (acknowledging that claim construction sometimes “involves little more than the application of the widely accepted meaning of commonly understood words” (citation omitted)). Courts depart from the plain and ordinary meaning of a claim term only “when a patentee acts as his own lexicographer” or “when the patentee disavows the full scope of the claim term in the specification or during prosecution.” *Poly-Am., L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016) (citations omitted).

“The intrinsic record in a patent case is the primary tool to supply the context for interpretation of disputed claim terms.” *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1310 (Fed. Cir. 2005) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Such intrinsic evidence includes “the words of the claims themselves, the remainder of the specification, [and] the prosecution history,” which “consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1314, 1317 (citations omitted). The prosecution history of a parent application also constitutes intrinsic evidence that may be useful in construing claim terms. *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp.*, 90 F.3d at 1582).

Courts also may rely on “extrinsic evidence”—that is, “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317 (citations omitted). Extrinsic evidence “can

shed useful light on the relevant art,” but it “is less significant than the intrinsic record in determining the legally operative meaning of disputed claim language.” *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004) (internal quotation marks and citation omitted); *see Phillips*, 415 F.3d at 1317. Extrinsic evidence is “less reliable” than intrinsic evidence and may not be used to contradict intrinsic evidence. *Phillips*, 415 F.3d at 1318; *see Mantech Env’t Corp., v. Hudson Env’t Servs., Inc.*, 152 F.3d 1368, 1373 (Fed. Cir. 1998).

The Parties’ claim-construction dispute regarding “an inlet . . . to selectively deliver a dye solution for leak detection purposes into the interior of said housing” boils down to construing “selectively deliver.” As in *Red Rhino I*, the Parties agree that the term “inlet” requires no construction, and “Anderson . . . concedes there is no meaningful difference between the claim’s use of ‘into the interior of said housing’ and Anderson’s proposed construction of ‘into the inside of the housing.’” Def.’s Mem. at 11 n.2 [ECF No. 83]; Pl.’s Mem. at 9 n.2. To recap, Anderson says “selectively deliver” means “to deliberately inject or force dye into the inside of the housing.” Joint Claim Construction Statement. Red Rhino argues that no construction is necessary and, alternatively, that “selectively deliver” should be construed as it was in *Red Rhino I* to mean “an inlet having the capacity to deliver, or not deliver, a dye solution through the inlet according to the operation of natural hydrodynamic forces and the presence or absence of a leak.” Pl.’s Mem. at 9.

Though no construction has been identified that aligns perfectly with the claim language and other intrinsic evidence, the best answer here is to construe “an inlet . . . to selectively deliver” in the ’383 Patent to mean *an inlet allowing an operator to select*

among options for delivering dye into the interior of the housing. This construction is faithful to the claim language. It understands the claim to describe the inlet as serving the purpose of permitting a choice among options for delivering a dye solution. This reading also is consistent with, and therefore supported by, the specification. The specification describes how an operator might opt to use a dye solution in either of two ways to detect leaks: first, by connecting a hose to the inlet and inserting a dye solution that will, if there is a leak, “be sucked into the . . . inlet,” and second, by injecting a dye solution through the inlet “using a syringe or the like.” ’383 Patent at 3:58–67, 4:1–3. Construing “selectively” to refer to the operator’s choice reflects the availability of both (and perhaps other) options for delivering a dye solution and allows for the possibility that a dye solution may or may not enter the interior of the housing depending on the operator’s selection and, perhaps, hydrodynamic forces. It is true that in *Red Rhino I*, Anderson’s suggestion that “selectively” in the ’959 Patent referred to an operator’s selection or choice was rejected on the ground that it conflicted with the claim’s grammar. *Red Rhino I*, 2019 WL 4039972, at *8 (“Grammatically, the phrase ‘selectively deliver’ as used in this claim term does not refer to the action of a sentient human operator, but to an ‘inlet,’ which is not sentient and is not capable of choice.”). At least viewed in isolation, the claim at issue here uses the same grammar. ’383 Patent at 6:35–38. The ’383 Patent presents differences, however. Interpreting the ’959 Patent required distinguishing between “selective[] deliver[y]” on the one hand and mere “deliver[y]” on the other. See *Red Rhino I*, 2019 WL 4039972, at *8. The ’383 Patent’s claims do not articulate this same distinction explicitly. Also, understanding “selectively deliver” to refer to the operator’s selection would not have made

sense in *Red Rhino I* because “selectively” modified “only the first of three distinct leak-detecting functions enabled by the inlet in the rigid housing.” *Id.* at *7. These differences were significant to the construction of “selectively deliver” in *Red Rhino I*.

By comparison, the Parties’ positions seem flawed, or at least more imperfect. Anderson’s position that “selectively deliver” means “to deliberately inject or force dye into the inside of the housing” would render “selectively” superfluous. If, as Anderson suggests, the point of the phrase “to selectively deliver a dye solution for leak detection purposes into the interior of said housing” is to “require[] deliberate injection of dye directly into the interior of the housing,” Def.’s Mem. at 12, then “selectively” serves no purpose; just saying “to deliver” would do the job. Anderson advances one argument in support of its position that is plainly incorrect. It argues that “[u]nlike claim 1 of the ’959 Patent, . . . the term ‘selectively’ in Claim 1 of the ’383 Patent does not modify more than one verb: ‘selectively’ only modifies ‘deliver.’” *Id.* at 19. But that is also true of the construction given the ’959 Patent in *Red Rhino I*: “The only grammatically sound reading of this portion of the claim requires that the word ‘selectively’ be read as modifying only the first of the three distinct leak-detecting functions that may be enabled by the inlet in the rigid housing.” *Red Rhino I*, 2019 WL 4039972, at *7. Thus, in *Red Rhino I*, as here, “selectively” modified only “deliver.” *Id.* One or the other of the preferred embodiments described in the specification would not be possible under Anderson or Red Rhino’s proposed construction. Accepting Anderson’s proposed construction would rule out any embodiment that did not involve injection or forced insertion of dye into the interior of the housing, including the use of a hose or other operations that rely on the operation of natural

hydrodynamic forces to achieve delivery. Accepting Red Rhino’s proposed construction would do the opposite—*i.e.*, rule out any operation involving forcible injection of dye into the housing.

II

The Parties next dispute the construction of “rod” as it appears in the claim term “threaded rod.” Joint Claim Construction Statement. (The Parties do not dispute the meaning of “threaded.”) Anderson says “rod” should be construed to mean either “[a] threaded solid or hollow rod.” *Id.* Recognizing that *Red Rhino I* rejected this proposed construction and interpreted “rod” to mean a rod that is “solid, not hollow,” 2019 WL 4039972, at *14, Anderson argues that new evidence warrants a different construction here. Red Rhino disagrees. As with “selectively deliver,” Red Rhino argues that the doctrine of issue preclusion requires that “threaded rod” be construed as it was in *Red Rhino I*. Alternatively, Red Rhino argues that either no construction is necessary because the plain and ordinary meaning of “rod” connotes an object that is not hollow, or that “rod” should be construed as a “solid shaft.” Joint Claim Construction Statement.

Issue preclusion applies to this question. Anderson obviously was a party in *Red Rhino I*. At least on the surface, the issue sought to be precluded—the construction of “threaded rod”—is the same as the issue involved in the prior action. The ’383 Patent uses the term “threaded rod” in the same way the ’959 Patent uses the term. There is no question that issue was actually litigated in *Red Rhino I*. Though neither Party asked explicitly that “threaded rod” be construed in *Red Rhino I* as part of the *Markman* proceedings, both Anderson and Red Rhino eventually took the position that determining the meaning of the

term “rod” posed a question of claim construction, and that is how the issue was resolved. *See Red Rhino I*, 2019 WL 4039972, at **13–14. The meaning of threaded rod was determined for purposes of, and was essential to, the entry of summary judgment against Anderson’s invalidity defense based on anticipation. *Id.* at *14. Construction of the term was the sole ground on which summary judgment was entered against this defense. And the case ended with the entry of a final judgment, *id.*, ECF No. 117, based on the Parties’ stipulation, *id.*, ECF No. 114, that included permanent injunctive relief forbidding Anderson “from manufacturing, using, offering for sale, selling, or importing, in or into the United States, any products that embody the invention claimed in the ‘959 Patent, including but not limited to the “Light Tester” product shown in Figure 1 of the Stipulation.” Judgment ¶ 1.

Anderson argues that issue preclusion does not apply here because “the prosecution history of the ’383 Patent . . . was not before the Court in [*Red Rhino I*.]” Def.’s Reply Mem. at 7. It is true that at least some cases from outside the Eighth Circuit have held that issue preclusion does not apply in the claim-construction context when new prosecution history is available. *See Golden Bridge Tech., Inc. v. Apple Inc.*, 937 F. Supp. 2d 490, 496–97 (D. Del. 2013); *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, Civ. No. 08-309-JJF-LPS, 2009 WL 4928029, at **16–17 (D. Del. Dec. 18, 2009). But these cases do not justify the same result here. They are factually distinguishable because the relevant prosecution history considered in each did not exist when the claims were first construed. *Golden Gate Bridge Tech.*, 937 F. Supp. 2d at 496; *Power Integrations, Inc.*, 2009 WL 4928029, at **16–17. Here, the ’383 Patent was issued October 2, 2018, well before

issuance of the claim construction order in *Red Rhino I*, and the prosecution history Anderson has introduced in this case was available then. In these circumstances, “a significant line of cases suggest[s] that litigation of an issue necessarily encompasses all arguments and evidence that could be presented to resolve the issue, and that the mere discovery of new evidence does not create a new issue.” *Liberty Mut. Ins. Co. v. FAG Bearings Corp.*, 335 F.3d 752, 762 (8th Cir. 2003). No reason has been identified that might justify a decision not to apply this principle in the patent context. Cf. *Jet, Inc. v. Sewage Aeration Sys.*, 223 F.3d 1360, 1362 (Fed. Cir. 2000) (applying similar “transactional” rule to determine whether claim preclusion barred a petition to cancel a federally registered trademark). Anderson also argues that “[i]ssue preclusion should not apply as to the term ‘threaded rod’ for the additional reason that the issue sought to be precluded was not determined by a final judgment, as required by Eighth Circuit precedent.” Def.’s Reply Mem. at 8. The sole authority Anderson cites for this proposition is *Rudolph Techs., Inc. v. Camtek Ltd.*, No. 15-cv-1246 (WMW/BRT), 2016 WL 8668504, at *2 (D. Minn. Aug. 8, 2016). Def.’s Reply Mem. at 8. Apart from reciting the Eighth Circuit’s five issue-preclusion elements, including that “the issue sought to be precluded must have been determined by a valid and final judgment,” *Rudolph Techs.* says nothing about this issue. And Eighth Circuit cases make clear that the claim-construction and summary-judgment order in *Red Rhino I* is a valid and final judgment for purposes of issue preclusion. *Twin City Pipe Trades Serv. Ass’n, Inc. v. Wenner Quality Servs., Inc.*, 869 F.3d 672, 677 (8th Cir. 2017); *Robinette v. Jones*, 476 F.3d 585, 588–90 (8th Cir. 2007).

All of this is not to say that Anderson hasn't identified grounds that might have justified a different outcome or reconsideration of the construction given "threaded rod" had they been presented in *Red Rhino I*, but the answer to this point is not to reconsider that construction in this case. "The underlying goal of issue preclusion . . . is to promote judicial economy and finality in litigation. *FAG Bearings Corp.*, 335 F.3d at 758; *see also Parklane Hosiery Co. v. Shore*, 439 U.S. 322, 326 (1979) ("Collateral estoppel, like the related doctrine of res judicata, has the dual purpose of protecting litigants from the burden of relitigating an identical issue with the same party or his privy and of promoting judicial economy by preventing needless litigation."); *Nasem v. Brown*, 595 F.2d 801, 806 (D.C. Cir. 1979) ("Application of the doctrine of collateral estoppel represents a decision that the needs of judicial finality and efficiency outweigh the possible gains of fairness or accuracy from continued litigation of an issue that previously has been considered by a competent tribunal."). Reconsidering *Red Rhino I*'s construction of "rod" here would subvert these objectives. Therefore, the term "threaded rod" is construed here to mean what it was construed to mean in *Red Rhino I*: *a threaded solid (not hollow) rod*.

III

The Parties' final dispute concerns construction of the term "opaque material" appearing in dependent claim 7. Joint Claim Construction Statement. Anderson argues that this term should be construed to mean "[a] material that cannot, in and of itself, be seen through, but which has provisions for visual observation of dye movement." *Id.* Red Rhino says that no construction is necessary and that the term may be given its "plain and ordinary meaning." *Id.*

Resolving this dispute would be easy if it were really just about construing “opaque material,” as the Parties’ Joint Claim Construction Statement implies it is. The ordinary and customary meaning of “opaque” is unambiguous and widely known. It means “[i]mpenetrable by light; neither transparent nor translucent[]” and “[n]ot reflecting light; having no luster[.]” *The American Heritage Dictionary of the English Language* 1266 (3d ed. 1992); *see also Merriam-Webster’s Collegiate Dictionary* 868 (11th ed. 2003) (“blocking the passage of radiant energy and esp. light”). In other words, Anderson is correct that “opaque material” “cannot . . . be seen through,” and Red Rhino is correct that this meaning is sufficiently “plain and ordinary” not to warrant construction. Joint Claim Construction Statement.

But that is not what this dispute is really about. The dispute is instead about whether claim 7 of the ’383 Patent describes a housing that is entirely opaque or one that is not entirely opaque and is partially transparent allowing for visual observation of dye inside the housing. This dispute stems from the Parties’ activities in response to *Red Rhino I* and the ’383 Patent’s claim language and specification. As Anderson explains in its principal brief:

It is no secret [Red Rhino’s] ‘383 Patent is an attempt to cover Anderson’s re-design of a product [Red Rhino] alleged to infringe the ‘959 Patent in [*Red Rhino I*]. In that case, [Red Rhino] accused Anderson’s Light Tester product of infringement. Because all claims of the ‘959 Patent require the housing be “transparent whereby the flow of dye in the hollow housing is observable by a user of the device,” . . . and because Anderson’s leak testing method does not require observation of dye inside the housing, Anderson re-designed the Light Tester to have an opaque housing. [See Compl., Ex. B at 1.] Shortly thereafter, [Red Rhino] filed the application that

ultimately issued as the ‘383 Patent. Not surprisingly, the ‘383 Patent includes dependent Claim 7 covering an opaque housing, and [Red Rhino] now asserts Claim 7 against Anderson’s re-designed Light Tester.

Def.’s Mem. at 26. Red Rhino has not disputed Anderson’s description of these facts. *See* Pl.’s Mem. at 15–17. Because, among other reasons, Claim 1 of the ’383 Patent includes a requirement that “the flow of the dye inserted in the interior is observable by a user of the device,” Anderson argues that dependent Claim 7’s language—“wherein said housing is of an opaque material”—cannot mean that the housing is entirely opaque. Or, as Anderson puts it: “[Red Rhino’s] attempt to claim an opaque housing can only go so far: the express claim language will not allow any attempt by [Red Rhino] to cover a product in which the dye inserted in the interior of the housing is not observable by the user.” Def.’s Mem. at 26. For its part, Red Rhino does not stop at arguing that “opaque material” requires no construction; it goes on to argue that Claim 7 should not be construed as “requiring the visual observation of dye within the interior of the housing, which is not found in the plain claim language of the claim.” Pl.’s Mem. at 16.

With this background in mind, it seems preferable to understand the Parties’ dispute concerning the construction of Claim 7 of the ’383 Patent to center on what it means for the housing to be “of an” opaque material. In other words, as used in Claim 7, does this phrase mean “said housing is *entirely* of an opaque material” or “said housing is *not entirely* of an opaque material” so that it permits a user to observe the inside of the housing?

The better answer is to construe this language to mean that *the housing is of an opaque material, though not entirely, such that it permits an operator to observe the*

housing's interior. This construction follows naturally from the language of Claim 1. “A dependent claim is interpreted to include all limitations of the independent claim on which the dependent claim depends plus the added limitation.” *Mynette Tech., Inc. v. United States*, 139 Fed. Cl. 336, 349 n.16 (Fed. Cl. 2018) (quoting Amy L. Landers, *Understanding Patent Law* § 4.04[A] (2d ed. 2012)); *see also Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1147 (Fed. Cir. 2004) (Newman, J., dissenting in part). Claim 1 includes the limitation that “the flow of dye inserted in the interior is observable by a user of the device[.]” ’383 Patent at 6:39–40. The more natural reading of this limitation understands “inserted in the interior” to mean that dye has reached the inside of the housing and is observable there. Red Rhino argues that this phrase means only that “a user can observe the flow of dye as it enters the housing.” Pl.’s Mem. at 16. This interpretation, however, seems irreconcilable with the phrase’s use of the past tense “inserted,” meaning insertion of the dye inside the housing has occurred, whether through the operator’s forcible injection or hydrodynamic forces. Red Rhino also argues that this interpretation cannot be squared with Claim 1’s use of the word “flow,” implying that “the flow of dye” can occur only outside the housing. Red Rhino cites no authority for this factual assertion, and there is no reason to think that “the flow of dye” cannot also occur inside the housing.

This construction also is supported by the specification. As noted earlier, “the specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp.*, 90 F.3d at 1582). Here, the specification teaches:

“Still another objective of this invention is to disclose the use of an opaque housing using either transparent panels, sight glass, of [sic] a transparent inlet to provide a means for visual observation of dye movement.” ’383 Patent at 2:1–4. Elsewhere, the specification teaches:

[T]he housing may be opaque with provisions to determine the flow of dye. For instance a fluid inlet barb may be provided at top of housing communicating with the interior of housing for injecting fluid into the interior of housing. The fluid inlet barb may be transparent if the housing is opaque wherein fluid flow can be visually observed.

Id. at 3:34–40 (drawing references omitted). Red Rhino argues that looking to the specification for support improperly “reads limitations found in the specification, but not claimed, into the claim language[,]” and it cites authorities supporting the proposition that it is improper to import limitations from the specification that are not part of the claim. Pl.’s Mem. at 16–17; *see SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.”). There may be ““a fine line between construing the claims in light of the specification and improperly importing a limitation from the specification into the claims.”” *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 659 F.3d 1369, 1370 (Fed. Cir. 2011) (Moore, J., dissenting from the denial of petition for rehearing en banc) (quoting *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1305 (Fed. Cir. 2011)). Regardless, here, there is enough in the ’383 Patent’s claims

to conclude that looking to the specification sheds light on plain meaning and does not improperly narrow a claim term. *Retractable Techs., Inc.*, 659 F.3d at 1371.

ORDER

Based on the foregoing, and on all of the files, records, and proceedings herein, **IT IS ORDERED** that the disputed terms of U.S. Patent No. 10,088,383 are construed as set forth in the above opinion.

Date: January 4, 2021

s/ Eric C. Tostrud

Eric C. Tostrud

United States District Court